WHIRRAKEE

October 1997 Vol. 18 No. 9

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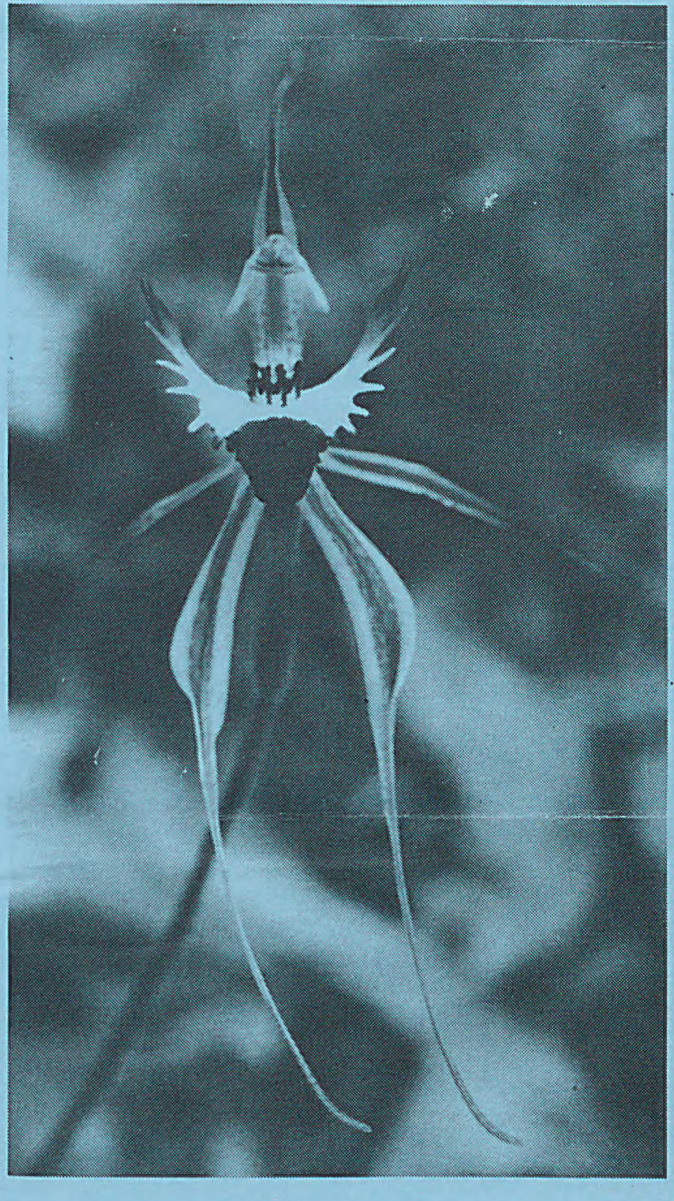

MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.

Address for correspondence: PO Box 396, Bendigo 3552

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Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $30; Family $35; Concession: Single $25; Family $30. *Whirrakee* subscription only is $30.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. Meetings start at 7:30pm and conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 7:30pm. Members of the Committee are the Office Bearers listed above, together with the following members:
J Burtonclay; S Pelczinski; M Lewis; D Collier; M Stone.

Excursions The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Full-day excursions normally commence at 10am (usually on a Sunday); half-day excursions normally commence at 2pm and may be either on a Saturday or Sunday. Full-day or half-day excursions are usually held on the weekend following the General Meeting. Campouts are held several times each year, usually coinciding with long weekends or holiday periods.

The Bendigo Field Naturalists Club has 2 active sub-groups:

Bird Observers Group: meets on the first Friday of the month, at 7:30pm. The venue for meetings is the Golden Square Senior Citizens Building.

President: Anne Bridley
Secretary: Jane Cleary

Mammal Survey Group: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.

Chairman: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
Equipment Officer: Ian Fenselau
Vice Chairman: John Guley

Front Cover Photographer: Ian Flecknoe-Brown

Following on from Tom Patullo's article about Duck Orchids in the last *Whirrakee*, *Caladenia tentaculata* (the Green-comb Spider Orchid) also has a trapping mechanism to ensure that visiting insects aid in pollination. The labellum is attached to the base of the flower by a hinge which allows it to swing upward when an insect enters the flower. Once the labellum moved up, the combs preventing its escape out the side, the insect is forced to exit the flower by passing the sexual organs. There it may rub off pollen (collected from a previous visit to another spider orchid) but at least it will pick up the pollinia of its captor plant and carry them away. The insect thus renders two services to the orchid, what it gets out of this deal is unclear. I suspect very little.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 18, No. 9, October 1997
Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles.
Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request (see article in March *Whirrakee*).

Editor's Note: The BFNC constitution states that various reports presented at the Annual General Meeting are published in the Whirrakee. Some are in this edition but since at least a few more typical field naturalist articles were considered essential, two reports had to be held over till the November edition. These were the Mammal Survey Report and the Secretary's Report. My apologies to Bill Holsworth and Rod Orr who had prepared these reports in good time.

More on Correas

Author: Peter Ellis

On reading Tom's article on Correas in the August *Whirrakee,* I was surprised that it was stated there are no red correas in the Bendigo district, well there's about 5 in my garden. But seriously, there is a small stand of the red form of *Correa reflexa* in one location only in the Whipstick a short distance off Black Rock Rd. If my memory serves me correct Ollie Hartland knew of the stand, probably because he harvested *Eucalyptus* leaves from the area. He showed the location to Reg Smart, who then took me out to see them, and subsequently a club excursion or two was organised to inspect this rare find. This would have been about 20 years or so ago, but in time I think for Frank Robbins to mark the spot in the appropriate Whipstick survey published in the Bendigo Naturalist. From memory, there were only a few red plants, perhaps half a dozen, and they were difficult to find, hidden in a patch of thick scrub that the Eucy cutters skirted around. They were never easy to locate as there were lots of the normal yellowish/green form dotted throughout and these always seemed in flower when the red ones weren't. However we tend to look for correas in autumn and winter which is when the green form is prolific, and the few red ones seem to be more in flower around September/ October. To make them easier to find Reg put in 3 or 4 posts in a row several paces apart and transversing the area of red plants. One of these wooden stakes is still there. I photographed the red correa about ten years ago and hadn't been back for some time until more recently. Because of its rarity I thought that perhaps it ought to be propagated and then additional plants established in prime locations such as at the club rooms (and one in my garden). I have been checking out the Whipstick site for several years without success and put this down to the very dry autumn/winter periods we've experienced, and hoping to hell they hadn't died out. Anyway two weeks ago I found one plant with one red flower, so have secretly marked the plant and Marilyn Sprague has some cuttings. Hopefully, soon we'll have some to plant as suggested. I will go out again in a few weeks and see if more can be located, if anyone is interested please let me know. The flower is a very deep red, similar to the Anglesea form and has the usual green skirt.

This may not be the only location but we've not found them elsewhere in the Whipstick. Redvers Eddy used to speak of a red correa in the Inglewood area and he entered a slide of it in photoflora (early to middle 1960's?). At the time he told me Inglewood people had sought his help in achieving a flora reserve in that locality, but the effort was not then successful. I cannot be any more specific. I have a vague feeling it may have been where the present flora reserve is located on the right after passing through Inglewood from Bendigo, but can't be sure. I don't know what contacts Red had in Inglewood at the time and the only other people that might be able to throw light on my recollections could be John Ipsen or Frank Cusack.

Another *Correa* that has always been of interest to me is the stand of *C. glabra* at the Terricks near Mitiamo. It is unusual because the new flowers are yellowish/green but turn to a dusty pink with age and the inside of the bell a deep ruby red. So there are times when the bush is covered with both pink and green bells. It hasn't as yet attracted horticultural interest for which it is a prime candidate, but at my suggestion Marilyn Sprague has propagated it. I once distilled essential oils from various plants supplied by the then Forests Commission for a BIT open day. The Terricks Correa was one and I can tell you it rivals Chinese scrub oil for pong.

Now, at Stuart Mill there was a magnificent stand of red *Correa reflexa*, similar to that illustrated on the cover of Rotherham's 'Plants of Victoria'. This was shown to me by Glenise Douglass's father. If you don't know who Glenise Douglass is, ask Rob Moors, he knows. This is one plant that definitely should have been propagated. I don't know if the plants still exist.

Tom in his article mentioned some correas that are grown in gardens and there are a few I could also recommend. One that is a beautiful salmon red and very prolific and bushy is *Correa minor* (sometimes called *C. pulchella*). Another very large-flowered red form of *C. reflexa* is "Clearview Giant" and there is also "Fat Fred", a wonderful variety. Geoff Sitch has several good varieties of *Correa* and one that I particularly like is a cross between *C. alba* and *C. reflexa*. It is called "Pinkie" and has Cobalt carbonate coloured (Rob or Glenise Moors can tell you what shade of pink this is) split bells. The flowers are short and open like *alba* but pendulous like *reflexa*. Another I have is a yellowish/green form of *reflexa* but the bells are as big as "Clearview Giant" and with a deeper green skirt at the base of the lime yellow bell.

Some 30 years ago when Sho Takasuka and I were exploring the Cooack section of the

Little Desert near Vectis (Mt Arapiles direction) I found a pastel pink flowered plant of *C. reflexa*. This was quite outstanding and I have not seen anything in cultivation that comes near it. I believe I could walk straight to the spot if I ever get back there, but whether the plant is still alive or the area hasn't been cleared, remains to be seen. One of the joys of having correas and other plants in the garden such as *Epacris*, is the attraction of honeyeaters. I sit out on either my back verandah or front porch and gloat on visits by Eastern Spinebills, New Holland Honeyeaters, Silvereyes and other delights I have yet to identify. So as my early Bendigo Naturalist articles were titled, "Be Natural, Go Native". I suppose in today's enlightened society I should say "Be Environmental, Go Endemic".

Postscript:

Since writing the above article I raced across to the Little Desert & Mt Arapiles, but to no avail. I couldn't get my bearing at Cooack and the location may have been cleared. However the remaining section is now part of the Little Desert National Park. No correas were in flower although I saw plenty of plants. I suspect the dry winter upset their pattern. However the beautiful, yellow *Phebalium*, the pink *Baekea crassifolia*, and the large fairy wax plants at Mt Arapiles were a treat. I called in at Wychitella forest on the way and, after 20 years, found the beautiful deep red form of *Grevillea rosmarinifolia* there. Again, I have passed a few cuttings onto Marilyn Sprague.
One of the special interests I have is in the horticultural side of things where you don't only grow particular species of plants, but where you select and preserve, through cultivation, special forms or variants of these species and naturally occurring hybrids.

Some that Marilyn Sprague obtained from me include:

1. Large-flowered pink *Eriostemon verrucosus* from Edwards Road, One Tree Hill.
2. Dark pink *E. verrucosus* from Diamond Gully, courtesy Kerry Norris
3. Mt. Arapiles form of *E. verrucosus* (pink).
4. Long-leaf form of *E. myaporoides* ? from Salomon's Gully.
5. Red *Correa reflexa* from Whipstick.
6. Both lime green and red & green *Grevillea rosmarinifolia* from Bagshot North.
7. Form of white *Cryptandra amara* that turns pink with age from Eaglehawk North.
8. Pink and green respec. flowered *Correa glabra* from the Terricks (Mitiamo).
9. Hybrid between *Grevillea alpina* and *Grevillea rosmarinifolia* dwarf from Sedgwick/Mandurang South water race.
10. Deep red-styled form of *Grevillea rosmarinifolia* from Wychitella.
11. Cream coloured Golden Everlasting near Huntly East.

Two plants I have left to find are the chocolate form of Golden Everlasting at Myers Flat, and the pink form of Silky Tea-tree (*L. myrsinoides*) from Glenluce.
Marilyn also has in cultivation a cross between *Grevillea alpina* and *G. dryoides* from Big Hill.

Red Ironbark Regeneration
Author: Jenny Wilson

Marilyn Sprague's concern for the regeneration of Red Ironbark *E. tricarpa* (*Whirrakee*, September, 1997) captured my interest as I am currently studying the flowering patterns and nectar values of this species in Rushworth State Forest, and may be able to shed some possibilities as to the insect in the capsules, and the lack of regeneration of this species. The Eucalypt nectar fly *Drosophila flavohirta* may be what Marilyn is seeing. The larvae of the fly develop in the nectar, thus exhibiting impressive powers of osmoregulation (Gainey, 1984). Tribe (1991) reports that while it occurs on white flowered species, the fly is relatively rare in Australia. It is considered a pest to beekeepers in South Africa, where it was accidentally introduced. However, the quantity and quality of Eucalyptus nectar is extremely variable and determined by many factors other than the presence of *D. flavohirta* larvae (Nicolson, 1994). The lack of regeneration of Red Ironbark in general may not be due to this or any other insect as many other factors contribute to slow or no regeneration. Before Europeans, Box and Ironbark forests consisted of mainly very large old trees with a diameter at breast height (DBH) of 76-91 cm with some really large trees of around 120 to 150 cm DBH (Newman, 1961). Mining, post cutting and

firewood collection has in the past led to, and continues to add to, the loss of most of these large old trees. As large trees have more flowers than smaller trees this could lead to a reduction in the numbers of seeds produced in a season. Older, dominant trees have been shown to produce more than 80% of a seed crop (Jacobs, 1955) and harvesting of Eucalyptus species even to 80 years of age may lead to inadequate amounts of seeds for natural regeneration by seedtrees (Hall, 1966). Pollinators too, such as birds, insects and mammals may not be doing their job of pollinating the flowers. This may be due to a reduction in the numbers of available pollinators, increased competition (deterring pollinators from an area, e.g. noisy miners), or if clearing has lead to too great a distance between trees to allow outcrossing. Outcrossing (the fertilisation of flowers between different plants) appears to produce more fertile seeds than if the trees are self-pollinated for many, though not all, Eucalypt species (Pryor, 1976). All of these factors, and more, may be impacting on the number of viable seeds that are available to germinate. The seeds that are viable then require appropriate conditions in which to germinate, and many of these conditions may be less available due to human interference, e.g. soil compaction and erosion, loss of habitat, competition from weeds, etc. Unfortunately, we still know very little about the ecology and biology of Box and Ironbark forests, and the trees which dominate them.
I hope that this information has been of interest even if it does not provide any answers!

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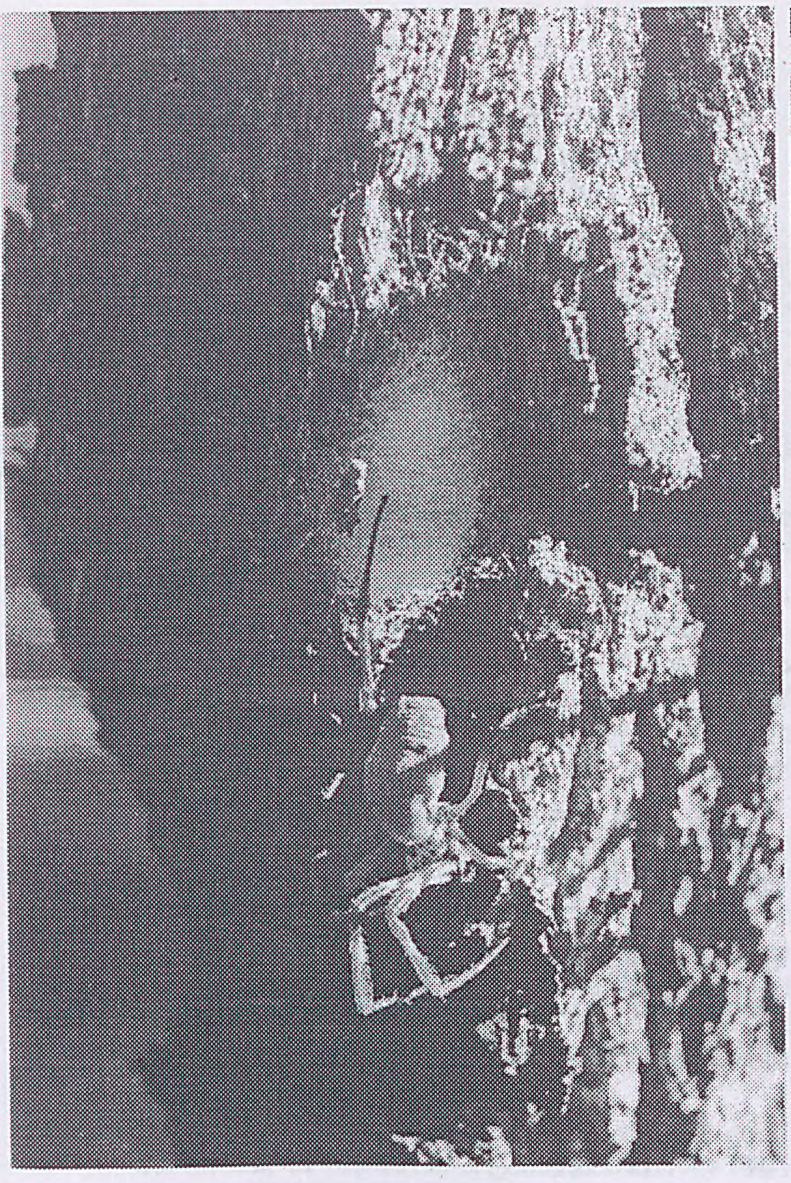
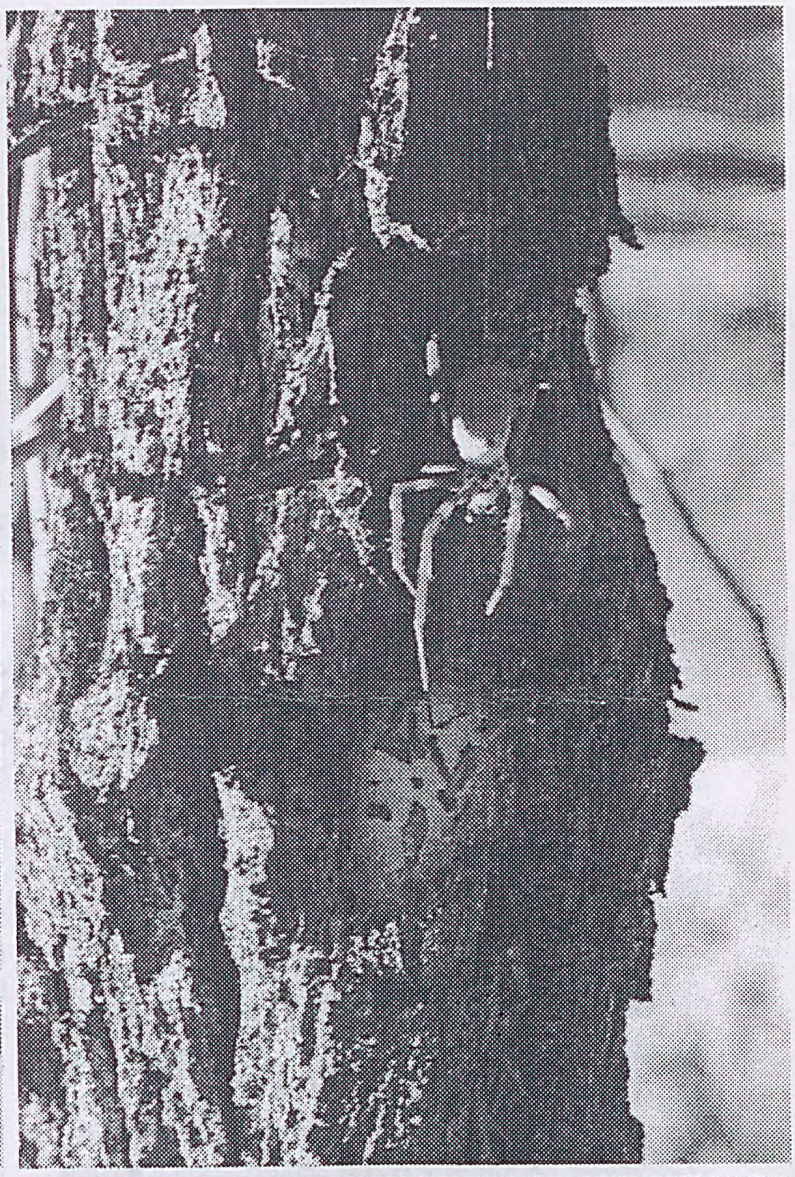
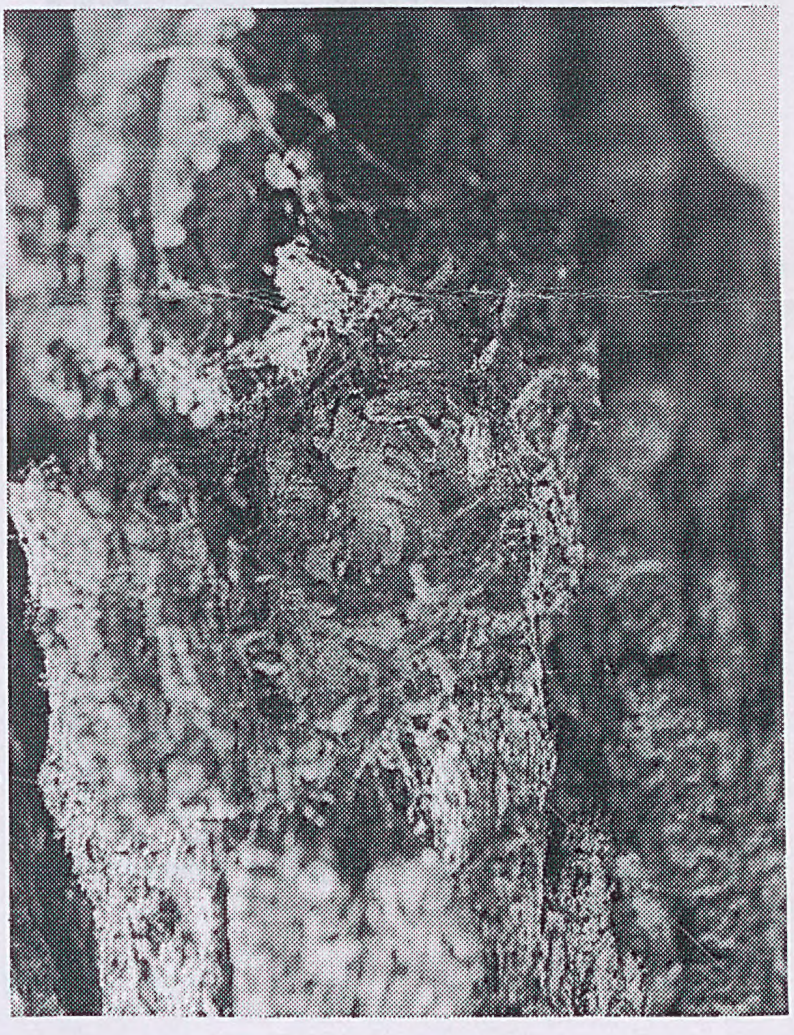
The Concluding Events in the Life of *Nephila* ?
Author: Fred Watts

This article is a continuation of one by the same author, printed in the August Whirrakee.
Fred Watts wrote that his patience was sorely tried as he visited this spider almost every day for seven weeks....

...The female *Nephila* spider under observation May 10 seemed unaffected by the first cold days of winter, as it remained at the web until June 28 with the male present for some weeks, when at about 5pm, I was fortunate to see it move across to the small ironbark partly supporting the web, and with little delay select a hollow in the bark, which it then began to line with silk.
At 9.30am next morning I found the spider still at work on its egg sac, which now appeared to be completed, and quite soon it began to adhere single fragments of bark and other material obtained quite handy to the egg sac.
The spider gathered a fragment with its palps or jaws. It was then transferred to a leg, and then adhered with silk to the spinneret at its rear. Finally the spider pressed its rear to the egg sac and so the fragment was attached.
I returned home and back for lunch and the spider was still decorating the egg sac, and this work proceeded until 3pm when my time and patience ran out.
My neighbour Collis Needs, who walked his dog in the area, examined the spider about 5pm, when he found it apparently lifeless as it dangled a few centimetres below the egg sac, now almost completely hidden.
We both visited the site next morning but there was no trace of the spider, whether it revived enough to move away or its meagre body was consumed by some creature, we can but guess.







Going, going, ...gone
Female *Nephila* decorating her egg sac with bark fragments and other materials till it blends in perfectly with the stem of the ironbark (Photographer: Fred Watts)

From the Mailbag
Author: Elaine Mathison

Each month the club receives a number of newsletters and magazines: some by subscription and some in exchange for *Whirrakee*. These are available from the Club library.

THE VICTORIAN NATURALIST
(FNCV) Vol.114(3) 1997 June

This issue features reports from the Mistletoe Forum sponsored by the FNCV during 1996.

"Mistletoes in Victoria" by Neville Walsh and Jeff Jeanes compares and discusses the two families of mistletoes found in Australia. Twelve species are present in Victoria.

"Mistletoe in Forest Management in Victoria" by P.C. Fagg reports that a recent survey has shown that mistletoe occurrence is widespread and most likely in box-ironbark forests. Various techniques have been tried to reduce the frequency of infestation.

"Mistletoes in the Rural Landscape - Getting the Balance Right" by Ray Thomas reports that land clearance has resulted in widespread ecological disturbances. Community concern over increasing mistletoe levels and "dieback" have led to revegetation activities in many areas.

"Behaviour, Voice and Breeding of the Mistletoebird in Arid Woodland" by Nick Reid describes the foraging, breeding and territorial behaviour of this species.

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PARKWATCH(VNPA)
September 1997 No. 190

"Winter of Discontent" by Charlie Sherwin reports that "the amount of firewood extracted from Victoria's native forests rivals the woodchip industry in both its scale and its environmental effects."

"Landcare: positive and proven force for rural landscapes" by Rob Youl describes the beginnings and development of this potent force for environmental restoration.

"History Notes: Brisbane Ranges National Park" by Daniel Catrice outlines the history of the Brisbane Ranges and focuses on the events that led to its reservation as a national park in 1973.

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THE BIRD OBSERVER(BOCA)
September 1997 No. 778

"The Truth about the Lyrebird" by Tom Tregallas is taken from an undated handwritten manuscript recently given to BOCA. The writer spent many hours in Sherbrooke Forest, actually living in a large hollow log.

"Lure of the Lerp" by Ellen McCulloch describes the many species attracted to a large lerp infested fig tree.

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Also received recently:

*Castlemaine Naturalist(CFNC)
September 1997
*Newsheet(Ballarat FNC)
September 1997
*Geelong Naturalist(GFNC)
September 1997
*Newsletter(Maryborough FNC)
Vol. 46 No. 1

*These Troubled Times: newsletter of local groups concerned about mining in residential areas.

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Conservation and Politics

President's address during the Annual General Meeting, September 10, 1997

Author: W. N. Holsworth

Many years ago I read a play about a well respected Doctor in a small Scandinavian village. As near as I can remember the story, the village had two industries: half the village income came from a profitable tannery, the other half from tourism based on a mineral spring and spa.

The doctor observed that many of the village children were developing an unusual set of symptoms which he eventually traced to contamination of the water supply. The source of the contamination was the tannery.

When he told the mayor and councillors they were put in a quandary. To stop the pollution they would have to close the tannery and half the village would be unemployed. If they didn't stop the pollution and word got out that their mineral spring water was contaminated, the tourist industry would collapse and half the town would be unemployed.

Their solution was to discredit and drive the good doctor out of the country. NEVER MIND THE CHILDREN'S FUTURE.

Like most good plays, it tells us something about ourselves, our values and our behaviour. Australian society today still denigrates the messenger that says the ozone hole is increasing, the planet is warming, the soils are salty or the forest is diminishing. The politicians avoid trying to correct the problems if the solution harms the economy. NEVER MIND THE CHILDREN'S FUTURE.

Why do we think this way? What is the history of our attitudes to our home, the planet earth?

Long before laws were written societies established religious practices or held beliefs such as taboos, and totem animals, and knew the dwelling places of good and bad spirits. These understandings of the world had the function, if not the purpose, of protecting some plants, animals or areas from excessive use.

Around the world man has viewed his environment, or parts of it, as sacred. Consider the Royal Forests of Europe. Consider the temple forests protected by followers of other religions. Recently in Thailand monks tried to prevent the destruction of forests by building monasteries in them and declaring the forest sacred, but the monks were criticised by the politicians and business men as being too materialistic, and said the monks should concern themselves only with spiritual matters.

Who Owns the Wildlife: Early Legislation and Nature

Confrontation between the people and the government or rulers over conservation practices is not new. In England, the successor to William the Conqueror, King William II was killed in 1100 AD. by an arrow that was shot by someone who disliked the hunting restrictions declared for the "New Forest". As a consequence of that, in 1215, the Magna Carta gave ownership of the wildlife to the people and the king only held it in trust for the people.

Henry III, in the Charter of the Forests (1225), established the position that ownership of wild animals is held by the government having the status of a trustee. Today, the situation generally pertains to Australia's laws. The wildlife belongs to the State until it is killed, after which it belongs to the hunter. It never belongs to the landowner who provides the food and habitat.

Science And Philosophical Attitudes To Nature

In our Western Civilisation there has been for centuries the idea that all of nature was created by divine effort for man's use. Christian thought explained that the earth was beautiful because it was an expression of the Creator, and it was useful to man because he could get from it physical sustenance and religious inspiration. The first "biology" books, published about 400 AD, are known as bestiaries. They described animals in terms of moral lessons, and we still refer to them in our expressions such as the busy bee, wise owl, and the sly fox.

In the 17th to 19th century, European man considered himself to be the highest form of creation and believed that he should work in partnership with God to improve primeval nature and convert the forests and fields for his own purposes. Early European settlers in Australia had a philosophy derived from Francis Bacon and

Rene Descartes - that humans were free to exploit nature.
The development of natural science in the middle of the 19th century and the sentimental return to nature philosophy (which was created during the Period of Romanticism, mainly under the influence of Jean Jacques Rousseau,) prepared western civilisation for the conservation movement. Naturalists, such as yourself, are generally comfortable with this philosophy. It considers that there is a divinity in the natural order of all wild things of creation, and that it is an obligation of worship that nature should be preserved and protected. For this reasons national parks were established.

The National Park Movement

Yellowstone was the first National Park - created in 1872 because of the beauty of Yellowstone Falls. It was not created because of the wildlife and forests, which continue to be hunted and cut down. Yellowstone National Park owed its existence to Rousseau's philosophy – an obligation of worship that God's works should be preserved and protected.
Sequoia and General Grant National Parks were created in 1890. General Grant NP became Kings Canyon NP in 1940, and the two merged in 1943. [Note the religious origin of the name- The River of Holy Kings – named by the Spaniards - later became Kings Canyon. Preservation of the area was promoted by John Muir – very religious Scotsman – and founder of the Sierra Club] . Yosemite National Park was also added to the list in 1890, – again because its beauty was an expression of the Creator's work.
The protection of these large areas of California created a political controversy of the foresters and farmers vs the "greenies". The sawmillers and farmers in the area protested at the large area being "locked up". To balance the preservation of these large areas of National Parks with the demand for wood and grazing, National Forests were created around the Parks to guarantee a supply of wood and grazing land for the locals – and that was the beginning of the National Forest Reserves.

The Modern Conservation Movement

The modern conservation movement began in the United States of America at the end of the 19th century. One stimulus was the realisation by scientists, and acknowledgment by some politicians, that the natural resources of America were not inexhaustible. A second was the realization of the power that man possesses to change his relationship with a finite, natural world.
It was appreciated that in parts of Europe the forests were no longer adequate to supply timber and fuel, and there was erosion and loss of soil fertility caused by hundreds of years of intensive use. But in America, for the preceding 150 years, the idea of an unlimited expanse of forests and grasslands waiting to be "developed" was the popular myth among the farmers who followed foresters who followed the trappers westward.
By the 1870's the railways had crossed the continent, the vast herds of bison had been shot out, and in their place were cattle ranches. The foresters were the first to publicly realised that if the existing rate of cutting and burning continued the forests would soon be gone.
The champion of the conservation movement was a forester, Mr Gifford Pinchot, Head of the U.S. Forest Service. He recognised that the forests, the land, and the water resources should not be managed in isolation from each other, but that they constituted one united problem. One hundred years ago this was a NEW scientific concept.
The other scientist, an hydrologist, who played a particularly important role, was Major J.W. Powell. He understood the importance of the forest as natural regulators of stream flow and that forest protection was essential for river navigation, irrigation and power production.
A third, and most important person, was President Theodore Roosevelt. He was deeply interested in forests and wildlife and met frequently with Pinchot and Powell.
The important connections between forests, water and soils, were recognised by Pinchot as being extremely important for the future of America's natural resources. Similar views on the integration of natural resources were referred to at that time with cumbersome terms such as "balance of nature", and "economy of natural resources".
Pinchot coined the word **CONSERVATION** in 1907 to name the "Progressivism" political movement he was promoting. The source of Pinchot's idea for the word "conservation" came from discussions he had with English foresters who described their forestry officers working in

India, as "conservators" and the forest management zones as "conservancies".
Pinchot set down three principles of the conservation movement.

- "The **first principle** of conservation is development, the use of the natural resources now existing on this continent for the benefit of the people who live here now." This principle was in reply to critics who said conservationists aim was to withhold resources for future generations. Even today, exploiters of natural resources complain that "greenies" want to lock up the forests, etc.
- The **second principle**, that "conservation stands for the prevention of waste. . . " met with universal approval. Who would oppose it?
- The **third principle**:- "The natural resources must be developed and preserved for the benefit of the many, and not merely the profit of the few", provided the real force, to focus the resentments of the common man against the powerful and wealthy few.

With these principles Pinchot succeeded in directing the energies of the Progressive movement to conservation. And very importantly, it linked the Conservation movement to the political Progressive movement of Roosevelt. Conservation was later extended to include not just the forests, soil and water, but many causes, such as working conditions, not connected with natural resources.

Defining Conservation

The close connection of the Conservation movement to the political Progressive movement gave rise to many slogan type definitions of Conservation. Pinchot summarised his conservation philosophy as:

"Conservation is the use of natural resources for the greatest good of the greatest number for the longest time"
"The essence of conservation is the application of common sense to the common problems for the common good",
"Conservation is simple, obvious, and right."
"Conservation implies both the development and the protection of resources, the one as much as the other..."
"Conservation is the "wise use" of natural resources."

Since these "definitions" and much of the early writing on conservation were part of a political and social reform movement, it is not surprising that they do not stand up to careful analysis.

Conservation And The Future

However we might decide to define "Conservation" it involves some concept of a future for the resources and for mankind. If we expected no future then there would be no need to conserve, but if we can identify with the people of the future, our descendants, then we must try to answer the question: What kind of a world should they inherit? I think we should leave them a future of choices and a choice of futures.
In practical terms, for the renewable resources, this means that we must prevent the extinction of species, we must preserve intact large areas of natural biological communities, and we must avoid polluting the environment with biocides. It does not mean that mankind should not use the plants and animals, only that they should not be used up.

Environmental protection, conservation, pollution prevention, biodiversity, land and water management, green-house gasses, ozone depletion, etc., are locked together with politics whether you like it or not. If you want a livable planet as a home then you have to be political.
WE MUST MIND THE CHILDREN'S FUTURE.

President's Address and Annual Report of the Bird Observers Group
Author: Anne Bridley

Since I've been chairing these meetings I've occasionally thought about what is our role, our purpose as a group.

Recently I got a copy of our constitution which gives our aim as follows–

a. To study birds and their ecology with special reference to the Bendigo district for their protection and to ensure their continuance by preserving their habitat.

b. To promote this by periodical meetings, field excursions, discussions, exchange of ideas and publications.
I think it worthwhile to consider how our group has been fulfilling those aims.

The activities the group undertook in the last year were:
October - members night with discussion on various birds.
November - Peter Johnson spoke on Mallee Fowl in the Wychitella reserve.
December - Victor Hurley spoke on his work with Peregrine Falcons.
February - I spoke on bird migration with particular reference to some local species.
March - Rob and Cynthia Watkins showed slides of their visit to Africa.
April - John Robinson talked about foxes, emus and stone-curlews at Puckapunyal.
May - Ellen McCullough spoke on the use of the ground by birds, especially by stone-curlews.
June - I lead a discussion on identification of some of our more common smaller bush birds.
July - Pat Bingham gave a talk on crakes and rails of Australia.
August - Michael Clarke talked on his studies of the behaviour of miners, especially Bell and Noisy.
Average attendance at meetings was 18.

In November, Peter Allan lead an excursion to the Kamarooka SP which showed us nesting birds.
In July 97, a bird identification morning (lead by myself with help from Peter Allan) successfully introduced a couple of our members to some of the smaller and harder to identify birds.
Bird of the Night , as usually, gave us a chance to extend our local bird knowledge.
Individual members of our group took part in surveys such as the Swift Parrot survey, Bird of Prey Watch and Nest Record Scheme. We also have some keen bird photographers.
New bird observation forms were printed. Members continued to make verbal and written observations in and out of meetings, some of which found their way into *Whirrakee*.

I think that all of us who attended meetings during the year do know more about birds than previously. The syllabus covered birds both around Bendigo and further away. We have tried to improve our identification skills and increased our knowledge of the ecology of some species. Some of our meetings have been well attended and we have had some stimulating discussions.

The projects and bird studies that individual members undertake are valuable not only for conservation, but for broadening the knowledge base of the group as a whole. It has been some time since we tried to undertake a bird study project as a group, previous efforts have lapsed. A short-term project with clearly defined aims and time-limit may help to give our group some focus.

The other part of the aim of our group beside the study of birds and the protection of birds and their habitat.

We are only too aware of the continued destruction of bush around Bendigo. We are only a small group and we are not primarily a campaigning organisation. How can we best make a contribution to ensuring that the birds and bush that we enjoy so much survives?

One way is simply to continue studying and recording birds. The expertise of people who have lived in a district for years is irreplaceable. We can serve as a repository for information and local knowledge that will otherwise be lost or go unrecorded.

The other way is to encourage public knowledge of and interest in birds. I believe that if people love something they are much more likely to try and preserve it.

The bush around Bendigo, apart from a few weeks in spring, is not spectacularly beautiful. Most people don't fall in love with a patch of coppiced regrowth at first sight. It takes time and knowledge, the knowledge that comes from really looking closely at what we are seeing. What we need in the general public is that sort of familiarity that breeds love, not contempt.
We have had two excursions this year. More excursions may be a way of encouraging public interest in birds.

To finish these remarks, I would like to thank all those who helped with the running of the group this year–
Our secretary Jane Cleary and Lyn Hamilton for taking the minutes, Glenise Moors for preparing the minutes of the last AGM, Bill Flentje for organising bird of the night, Mary Wilson who did most of the work organising the syllabus, Bev Culvenor and Kerry Norris for submitting the Notes and Observations to *Whirrakee*. I would like to thank members for their support during the year.

STATEMENT OF RECEIPTS AND EXPENDITURES FOR THE YEAR ENDED 31 JULY 1997

GENERAL ACCOUNT - INVESTMENT ACCOUNT

RECEIPTS		EXPENDITURES		
Membership	3607.50	Whirrakee Production		1556.87
Subscription	240.00	Whirrakee Postage		469.35
Supper	119.70	Hall Cleaning		586.25
Sales	77.00	Projector		1325.05
Donations	90.00	Conservation Donations		800.00
Interest	457.16	Subscriptions		311.00
AGM Dinner	525.00	Vacuum Cleaner		295.00
Wildflower Show	315.15	Insurance		437.50
Bus for Excursion	165.00	Auditor		100.00
Advance Return	500.00	Stationery and Printing		278.09
Environmental Advice	50.00	AGM Dinner		403.00
Mammal Trap Loan	50.00	Garden Project		360.50
	6196.51	Club Sign		116.69
		Bank Charges		32.92
		Miscellaneous:		
		Incorporation Fees	64.00	
		Bus Excursion	164.55	
		P.O.Box Rental	44.00	
		Library Fitting	158.10	
Deficit for Year	1465.26	Petty Cash	158.90	589.55
	$7661.77			$7661.77
Bank Balance at 1 August 1996		Bank Balance at 31 July 1997		
Cheque A/c	2321.09	Cheque A/c		855.83
Term Deposit	4622.95	Term Deposit		8972.95
Term Deposit	1350.00	Deficit for Year		1465.26
Term Deposit	3000.00			
	$11294.04			$11294.04

I have examined the documents and records supporting the above statements of receipts and expenditures and I am able to report that in my opinion the statement of receipts and expenditures as shown, fairly reflects the transactions that have taken place in the bank accounts of the Bendigo Field Naturalists Club Inc. during the financial year ended 31 July 1997.

D.D.Wright C.P.A.

Auditor 9/9/97

STATEMENT OF RECEIPTS AND EXPENDITURES FOR THE YEAR ENDED 31 JULY 1997

PUBLICATION ACCOUNT - INVESTMENT ACCOUNT

RECEIPTS		EXPENDITURES	
Sales:		Book Postage	20.00
Wildflowers of Bendigo	889.97	Bank Charges	2.64
Eucalypts of Bendigo	493.70	Transfer to Term Deposit	1.67
Birds of Bendigo	625.86		
Orchids of Bendigo	876.60		
Interest	485.90		
Postage	25.05		
Donation	50.00	Surplus for Year	3422.77
	$3447.08		$3447.08
Bank Balance at 1 August 1996		Bank Balance at 31 July 1997	
Cheque A/c	1774.01	Cheque A/c	5196.78
Term Deposit	2755.17	Term Deposit	14556.84
Term Deposit	3300.00		
Term Deposit	3500.00		
Term Deposit	5000.00		
Transfer from Publication A/c	1.67		
Surplus for Year	3422.77		
	$19753.62		$19753.62

I have examined the documents and records supporting the above statements of receipts and expenditures and I am able to report that in my opinion the statement of receipts and expenditures as shown, fairly reflects the transactions that have taken place in the bank accounts of the Bendigo Field Naturalists Club Inc. during the financial year ended 31 July 1997.

D.D.Wright C.P.A.
Auditor
4/9/97

STATEMENT OF RECEIPTS AND EXPENDITURES FOR THE YEAR ENDED 31 JULY 1997

MEETING HALL ACCOUNT

RECEIPTS		EXPENDITURES	
Hall Hire	2658.00	Hall Hire	2490.00
Bank Interest	10.13	Return of Advance	500.00
		Repairs	17.25
Deficit for Year	347.18	Bank Charges	8.06
	$3015.31		$3015.31
Bank Balance at 1 August 1996		Bank Balance at 31 July 1997	
Cheque A/c	578.59	Cheque A/c	231.41
		Deficit for Year	347.18
	$578.59		$578.59

I have examined the documents and records supporting the above statements of receipts and expenditures and I am able to report that in my opinion the statement of receipts and expenditures as shown, fairly reflects the transactions that have taken place in the bank accounts of the Bendigo Field Naturalists Club Inc. during the financial year ended 31 July 1997.

D.D.Wright C.P.A.

Auditor

9/9/97

Diary

The General, Bird Observers Group and Mammal Survey Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

Speaker Syllabus for 1997 General Meetings

8 OCTOBER *Phytophthora*, Orchids and other horticultural topics.
Speaker: Dr Rob Cross, Horticultural Research Officer, Royal Botanic Gardens and National Herbarium.
Please Note:
The advertised speaker for the 8 October 1997 meeting, Dr. Moors from the Royal Botanic Gardens and National Herbarium is unable to come to Bendigo at this time.

12 NOVEMBER
Eltham Copper Butterfly
Speaker: Rob Price, Fauna Officer, Department of Natural Resources and Environment.

10 DECEMBER (Christmas dinner)

OCTOBER EXCURSION

Date: Sunday October 12
Length: Whole Day
Leader: Rod Orr
Meeting Place and Time: 9.00am at the Clubrooms in Golden Square.
Please note earlier time to allow for distance.
Location: Terrick Terrick State Park, Mitiamo
Subject: Grasslands of the Northern Plains - grasses, herbs, orchids etc.
We will be visiting the recently acquired block of relatively undisturbed grassland adjoining the park to the east.
Driving Distance: Just over 70km via Raywood and Dingee

Please bring: warm clothing (for strong winds), good walking shoes or boots, lunch and other refreshments, binoculars.

Bird Observers Group

Friday, October 3, 7:30pm
Jack McErlain will show a video on local and northern Australian birds.
Bird of the Night: White-plumed Honeyeater

Friday, November 7, 7:30pm
Ray Wallace will speak about waders.
Bird of the Night: Restless Flycatcher

Friday, December 5, 7:30pm
Bill Flentje will give a talk on various local birds
Bird of the Night: Magpie-lark

EXCURSIONS:
Saturday 11 October: Echuca BOCA excursion to Terrick Terrick National Park.
Meet at Mitiamo at 10:30am.
Leader Peter Allan

Sunday 23 November: Kamarooka State Park.
Echuca BOCA afternoon excursion
Leader: Peter Allan.

Other Events

'Ecological Sustainability in the Victorian Alps'
A landmark scientific symposium presented by the Royal Society of Victoria
Sunday 15th November 1997, 9.00am - 5.00pm
Laby Theatre, The University of Melbourne
Ring the editor for a copy of the program and registration form (54432797) or
the secretary of the Royal Society 03 9663 5259

10th Annual Alpine Ecology Course.
Bogong High Plains, 4th - 10th January 1998
for land managers, teachers and conservationists
"Six exhilarating days of field studies at the peak of the wildflower season"....
(ring Heather Anderson 03 9637 8427 or Warwick Papst 03 9479 1230 for details)

Supper

The usual arrangements for supper are as follows: members either bring a plate or pay $1 for supper. This small amount is used to reimburse members who purchase essential supper supplies.